

**Notice of Allowability**

Application No.

10/092,661

Examiner

Inder P. Mehra

Applicant(s)

PRESTON ET AL.

Art Unit

2617

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment dated 1/12/2007.
2. ☒ The allowed claim(s) is/are 20-22, 27, 30, 23-26 and 28-29 (Renumbered as 1-11 respectively).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 1/18/07
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### **DETAILED ACTION**

1. This office action is in response to amendment dated: 1/12/2007. Based on this amendment, claims 20-30 are pending.

#### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 1/18/2007 was filed. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

#### ***Allowable Subject Matter***

3. Claims 20-30 are allowed.

### **REASONS FOR ALLOWANCE**

4. The following is an examiner's statement of reasons for allowance:

The prior art of record does not disclose, teach or suggest directly, or indirectly the following limitations in combinations with other limitations of the claims, as follows:

**As recited by claim 20,**

“a transceiver that transmits the encoded digital voice signals over a digital voice channel of a wireless communications network; and

an inband signaling modem that converts a digital bit stream into synthesized tones and outputs the synthesized tones to the voice coder, the voice coder encoding the synthesized tone in the same manner as the electrical voice signals before being transmitted over the digital voice channel”.

**As recited by claim 23,**

“a transceiver that transmits the encoded digital voice signals over a digital voice channel of a wireless communications network; and

an inband signaling modem that converts a digital bit stream into synthesized tones and outputs the synthesized tones to the voice coder, the voice coder encoding the synthesized tone in the same manner as the electrical voice signals before being transmitted over the digital voice channel”.

including a packet formatter that converts the digital bit stream into inband signaling packets that include sacrifice bits that can be corrupted without losing any of the content of the digital bit stream”.

**As recited by claim 28,**

“a transceiver that transmits the encoded digital voice signals over a digital voice channel of a wireless communications network; and

an inband signaling modem that converts a digital bit stream into synthesized tones and outputs the synthesized tones to the voice coder, the voice coder encoding the synthesized tone in the same manner as the electrical voice signals before being transmitted over the digital voice channel”.

including a decoder coupled to the voice coder for detecting and decoding synthesized tones received over the digital voice channel; and wherein the decoder includes:

a first inband filter for filtering signals outside of a synthesized tone frequency band;

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a second out of band filter :for filtering signals inside the synthesized tone frequency band; and

a comparator that compares the signals outside the synthesized tone frequency band with the signals inside the synthesized audio tone frequency band and identifies signals as synthesized tones when the compared value is greater than a selected value.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Conclusion*

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Inder P. Mehra whose telephone number is 571-272-3170. The examiner can normally be reached on Monday through Friday from 8AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JEAN GELIN  
PRIMARY EXAMINER



Inder Pal Mehra 2/27/07

Inder P Mehra  
Examiner  
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